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THE PAST—THE PRESENT—FOR THE FUTURE.

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☞President MADISON's universally interesting address chiefly occupies the present sheet. There are few, if any, that will not read it with profit and pleasure.

President ADAMS has favored the editor with a long communication on revolutionary matters, which shall appear in our next.

We have also received some highly interesting extracts of letters from *South-America*, for our next number.

Every body is very anxious for an exposition of the late transactions in Florida. Many speculations are afloat, and some great speculations are said to have been *made* in the lands of those provinces; the possession of which seems to be guaranteed by an article of the capitulation of Pensacola, &c. *We want light.*

Agricultural Society of Albemarle.

FROM THE RICHMOND ENQUIRER.

TUESDAY, May 12, 1818.

Resolved, That the thanks of the Agricultural Society of Albemarle are due to the president for the enlightened and important address, this day delivered; that the secretary be, and he is hereby authorized and required to request a copy for publication; that he cause the said address to be published in the Enquirer; as also 250 copies, to be printed in the pamphlet form, one of which he shall transmit to each member of the society

Extract from the minutes,

P. MINOR, *Sec'y.*

MONTPELIER, May, 1818.

DEAR SIR—I have received your letter of the 12th inst. communicating the request of the Agricultural society of Albermarle, for a copy of the remarks addressed to it, at its last meeting. I cannot decline a compliance with the request, though I have much reason to apprehend, that what the society received with so partial an ear will not bear the deliberate perusal, for which an opportunity will be afforded.

With sincere esteem, I remain your friend and servant, JAMES MADISON.

PETER MINOR, ESQ. *secretary of the Agricultural Society of Albemarle.*

ADDRESS BY MR. MADISON.

[LATE PRESIDENT OF THE UNITED STATES.]

It having pleased the society to name me for their presiding member, I feel it a duty, on my first appearing among you, to repeat my acknowledgments for that honorary distinction; with the assurances of my sincere desire to promote the success of an establishment, which has in view so valuable an object as that of improving the agriculture of our country.

The faculty of cultivating the earth, and of rearing animals, by which food is increased beyond the spontaneous supplies of nature, belongs to man alone. No other terrestrial being has received a higher gift, than an instinct, like that of the beaver or the ant, which merely hoards for future use, the food spontaneously furnished by nature.

As this peculiar faculty gives to man a pre-eminence over irrational animals, so it is the use made of it by some, and the neglect of it by other communities, that distinguish them from each other, in the most important features of the human character.

The contrast between the enlightened and refined nations on some parts of the earth, and the rude and wretched tribes on others, has its foundation in this distinction. Civilization is never seen without agriculture: nor has agriculture ever prevailed, where the civilized arts did not make their appearance.

But closely as agriculture and civilization are allied, they do not keep pace with each other. There is probably a much higher state of agriculture in China and Japan, than in many other countries far more advanced in the improvements of civilized life. It is surely no small reproach to the latter, that with so great a superiority in science, and in the fuller possession of the auxiliary arts, they should suffer themselves to be outstripped in the very art by which both are essentially distinguished from the brute creation.

It must not be inferred however from the capacities and the motives of man, for an artificial increase of the productions of the earth, that the transition from the hunter, or even the herdsman's state, to the agricultural, is a matter of course. The first steps in this transition are attended with difficulty; and what is more, with disinclination.

Without a knowledge of the metals, and the implements made of them, the process of opening and stirring the soil, is not an easy operation; though one perhaps not requiring more effort and contrivance, than produced the instruments used by savages in war and in the chase.

And that there is a disinclination in human nature to exchange the savage for the civilized life, cannot be questioned—We need not look for proofs beyond our own neighborhood. The Indian tribes have ever shewn an aversion to the change. Neither the persuasive examples of plenty and comfort derived from the culture of the earth by their white brethren, nor the lessons and specimens of tillage placed in the midst of them, and seconded by actual sufferings from a deficient and precarious subsistence, have converted them from their strong propensities and habitual pursuits. In the same spirit, they always betray an anxious disposition to return to their pristine life, after being weaned from it by time, and apparently moulded by intellectual and moral instruction, into the habits and tastes of an agricultural people. A still more conclusive evidence of the bias of human nature is seen in the familiar fact, that our own people, nursed and reared in these habits and tastes, easily slide into those of the savage, and are rarely reclaimed to civilized society with their own consent.

Had the Europeans, on their arrival, found this continent destitute of human inhabitants, whose dangerous neighborhood kept them in a compact and agricultural state, and had their communication with the countries they left been discontinued, they might have spread themselves into the forests where game and fruits would have abounded; and gradually forgetting the arts, o longer ne-

cessary to their immediate wants, have degenerated into savage tribes.

An admired historian,* in his enquiry into the origin of the American savages, represents any such degeneracy as impossible. He lays it down as a certain principle that the necessary arts of life, whence once introduced among a people, can never be lost; that the dominion over inferior animals once enjoyed, will never be abandoned; and that America, consequently, must have been peopled from a country as uncivilized as itself. Yet he derives the American savages, generally, from the Tartars, whose example must have taught them the use of certain animals, for which a substitute might have been found in the bison or buffalo at least, (the same animal with the cow,) if not in the elk, the moose, or the Caraboo: and he regards the Esquimaux, a tribe distinguished, in several respects, for their rude condition, as descendants from the Greenlanders, (of the same modes of life with themselves,) who were a colony from Norway, planted in the ninth century; an epoch prior to which the Norwegians had made such progress in the arts, as to be capable of formidable maritime expeditions. The Greenland colony, therefore, must have undergone a degeneracy from the condition of its parent country. Without supposing the possibility of a transition from a better state of human society to a savage state, how would the learned historian have accounted for the introduction of the savage state at all?

The bent of human nature may be traced on the chart of our country. The manufacturer readily exchanges the loom for the plough, in opposition often to his own interest, as well as to that of his country. The cultivator, in situations presenting an option, to the labors of the field, the more easy employment of rearing a herd. And as the game of the forest is approached, the hunting life displays the force of its attractions. Where do we behold a march to the opposite direction? the hunter, becoming the herdsman; the latter a follower of the plough; and the last repairing to the manufactory or workshop.

Such, indeed, is the fascination of that personal independence which belongs to the uncivilized state, and such the disrelish and contempt of the monotonous labor of tillage, compared with the exciting occupations of the chase, or with the indolence enjoyed by those who subsist chiefly on the mere bounties of nature, or on their migratory flocks, that a voluntarily relinquishment of these latter modes of life, is little to be expected. We certainly perceive nothing in the character of our savage neighbors, from which it could be inferred that even the germs of agriculture, observed in their spots of maize, and a few other cultivated plants, would ever be developed into the extent implied by an agricultural life. To that little resource, combined with the game furnished by the forest and by the lake or the stream, their population and habits are adjusted. There may be said, in fact, to be a plenum of the former; because it is commensurate with their food, and this cannot be increased without a change of habits, which being founded in natural propensities, do not change of themselves.

The first introduction of agriculture among a savage people appears, accordingly, never to have taken place without some extraordinary interposition—Where it has not been obtruded by colonies transplanted from agricultural countries, as from Phœnicia and Egypt into Greece, and from Greece herself among her savage neighbors, the revolution has proceeded from some individual, whose singular endowments, and supernatural pretensions, had given him an ascendency for the purpose. All these great reformers, in ancient times, were regarded as more than men, and ultimately worshipped as gods. A very remarkable example, of modern date, is found in the revolution from the savage to the agricultural state, said to have been brought about by Manco Capac among the Peruvians, to whom he represented himself as the offspring of the sun.

Agriculture, once effectually commenced, may proceed of itself, under impulses of its own creation. The mouths fed by it increasing, and the supplies of nature decreasing, necessity becomes a spur to industry; which finds another spur in the the advantages incident to the acquisition of property, in the civilized state. And thus a progressive agriculture, and a progressive population ensue.

But although no determinate limit presents itself to the increase of food, and to a population commensurate with it, other than the limited productiveness of the earth itself, we can scarcely be warranted in supposing that all the productive powers of its surface can be made subservient to the use of man, in exclusion of all the plants and animals not entering into his stock of subsistence; that all the elements and combinations of elements in the earth, the atmosphere, and the water, which now support such various and such numerous descriptions of created beings, animate and inanimate, could be withdrawn from that general destination, and appropriated to the exclusive support and increase of the human part of the creation; so that the whole habitable earth should be as full of people, as the spots most crowded now are or might be made, and as destitute as those spots, of the plants and animals not used by man.

The supposition cannot well be reconciled with that symmetry in the face of nature, which derives new beauty from every insight that can be gained into it. It is forbidden also by the principles and laws which operate in various departments of her economy, falling within the scope of common observation, as well as within that of philosophic researches.

The earth contains not less than thirty or forty thousand kinds of plants; not less than six or seven hundred of birds; nor less than three or four hundred of quadrupeds; to say nothing of the thousand species of fishes. Of reptiles and insects, there are more than can be numbered. To all these must be added, the swarms and varieties of animalcules and minute vegetables not visible to the natural eye, but whose existence is probably connected with that of visible animals and plants.

On comparing this vast profusion and multiplicity of beings with the few grains and grasses, the few herbs and roots, and the few fowls and quadrupeds, which make up the short list adapted to the wants of man, it is difficult to believe that it lies with him, so to remodel the work of nature as it would be remodelled, by a destruction not only of individuals, but of entire species; and not only of a few species, but of every species, with the very few exceptions which he might spare for his own accommadation.

Such a multiplication of the human race, at the expense of the rest of the organized creation, implies that the food of all plants is composed of elements equally and indiscriminately nourishing all,

*Doctor Robertson.

and which consequently may be wholly appropriated to the one or few plants best fitted for human use.

Whether the food or constituent matter of vegetables, be furnished from the earth, the air or water; and whether directly, or by either, through the medium of the others, no sufficient ground appears for the inference that the food for all is the same.

Different plants require different soils; some flourishing in sandy, some in clayey, some in moist, some in dry soils; some in warm, some in cold situations. Many grow only in water—and a few subsist in the atmosphere. The forms, the textures, and the qualities of plants, are still more diversified. That things so various and dissimilar in their organization, their constitutions, and their characters, should be wholly nourished by, and consist of precisely the same elements, requires more proof than has yet been offered.

A case which has been relied on to prove that different foods are not necessary for different plants, is that of grafting or inoculating one kind of plant on another kind; the sap obtained by the stock for itself, being found to feed and perfect the graft. But this operation has its limits. It does not extend beyond plants having a certain affinity. The apple tree may be planted on the pear or quince. It will not succeed on the peach or the cherry. If the cases prove that the same food suffices for the apple and the pear, they equally prove that different foods are required for the apple and peach. It is said, even that the fruit from the peach, graft on the almond, is not precisely the same with that from a peach graft on a plum.

It may be offered as another argument to the same effect, that all animal and vegetable decompositions answer indiscriminately as manures. The fact is not percisely so. Certain manures succeed best with certain plants. It is true, nevertheless, that animal and vegetable substances, in a decomposed state, are, generally, mauures for plants. Fish even, an animal from the water, is successfully used as a manure for Indian corn and other crops. But this and similar examples prove only that some ingredients are the same in all animals and plants; not that all the ingredients in each are the same.

The chemist, though as yet a fellow student, as much as a preceptor of the agriculturist, justly claims attention to the result of his processes. From that source we learn that the number of known elements, not yet decomposable, is between forty and fifty; that about seven or eight belong to the organs of plants; that different elements enter into the composition of the same plant; and that they are combined in different numbers and in different proportions, in different plants. Supposing then, as must be supposed, that these different elements, in their actual quantities and proportions, are adapted to the quantities and the proportions of the existing varieties of plants, it would happen, in so great a change as that in question, with respect to the number and variety of plants, that the quantities and the proportions of the elements would not be adapted to the particular kinds and numbers of plants retained by man for his own use. Like the types of the alphabet, apportioned to the words composing a particular book, when applied to another book materially different in its contents, there would be of some a deficiency, of others a useless surplus.

Were it less difficult to admit that all the sources of productiveness could be exclusively appropriated to the food of man, is it certain that an obstacle to his indefinite multiplication would not be encountered in one of the relations between the atmosphere and organized beings?

Animals, including man, and plants may be regarded as the most important part of the terrestrial creation. They are pre-eminent in their attributes; and all nature teems with their varieties and their multitudes, visible and invisible. To all of them the atmosphere is the breath of life. Deprived of it, they all equally perish. But it answers this purpose by virtue of its appropriate constitution and character. What are these?

The atmosphere is not a simple but a compound body. In its least compound state, it is understood to contain, besides what is called vital air, others noxious in themselves, yet without a portion of which, the vital air becomes noxious. But the atmosphere in its natural state, and in its ordinary communication with the organized world, comprises various ingredients or modifications of ingredients, derived from the use made of it, by the existing variety of animals and plants. The exhalations and perspirations, the effluvia and transpirations of these, are continually charging the atmosphere with a heterogeneous variety and immense quantity of matter, which together must contribute to the character which fits it for its destined purpose of supporting the life and health of organized beings. Is it unreasonable to suppose, that if, instead of the actual composition and character of the animal and vegetable creation, to which the atmosphere is now accomodated, such a composition and character of that creation were substituted, as would result from a reduction of the whole to man and a few kinds of animals and plants, is the supposition unreasonable, that the change might essentially affect the aptitude of the atmosphere for the functions required of it; and that so great an innovation might be found, in this respect, not to accord with the order and economy of nature?

The relation of the animal part and the vegetable part of the creation to each other, through the medium of the atmosphere, comes in aid of the reflection suggested by the general relation between the atmosphere and both. It seems to be now well understood, that the atmosphere, when respired by animals, becomes unfitted for their further use, and fitted for the absorption of vegetables; and that when evolved by the latter, it is refitted for the respiration of the former: an interchange being thus kept up, by which this breath of life is received by each, in a wholesome state, in return for it in an unwholesome one.

May it not be concluded from this admirable arrangement and beautiful feature in the economy of nature, that if the whole class of animals were extinguished, the use of the atmosphere by the vegetable class alone would exhaust it of its life-supporting power; that, in like manner, if the whole class of vegetables were extinguished, the use of it by the animal class, alone, would deprive it of its fitness for their support? And if such would be the effect of an entire destruction of either class, in relation to the other, the inference seems to press itself upon us, that so vast a change in the proportions of each class to the other, and in the species composing the respective classes, as that in question, might not be compatible with the continued existence and health of the remaining species of the two classes.

The immensity of the atmosphere, compared with the mass of animals and vegetables, forms an apparent objection only to this view of the subject.

The comparison could at most suggest questions as to the period of time necessary to exhaust the atmosphere of its unrenewed capacity to keep alive animal or vegetable nature, when deprived, either, of the support of the other. And this period contracts itself at once to the imagination, when it is recollected that the immensity of the atmosphere is the effect of its elasticity and rarefaction. We know from the barometer, that condensed to the specific gravity of mercury, its rise above the surface of the earth would be but about thirty inches; and from the well pump, that condensed to the specific gravity only of water, which is nearly the same with that of the human body, its rise would be little more than as many feet; that is, a little more than five times the human stature. It is found that a single human person, employs in respiration not less than sixteen or eighteen times his own weight of common air, in every twenty-four hours. In different degrees, some greater, some less, the case is the same with most other animals. Plants make a correspondent use of air for their purposes

Other views of the economy of nature coincide with the preceding. There is a known tendency in all organized beings to multiply beyond the degree necessary to keep up their actual numbers. It is a wise provision of nature:—1, to guard against the failure of the species: 2, to afford, in the surplus, a food for animals whether subsisting on vegetables, or on other animals which subsist on vegetables. Nature has been equally provident in guarding against an excessive multiplication of any one species which might too far encroach on others, by subjecting each, when unduly multiplying itself, to be arrested in its progress by the effect of the multiplication:—1, in producing a deficiency of food; and where that may not happen, 2, in producing a state of the atmosphere unfavorable to life and health. All animals as well as plants sicken and die in a state too much crowded. It is the case with our domestic animals of every sort, where no scarcity of food can be the cause. To the same laws mankind are equally subject. An increase, not consisting with the general plan of nature, arrests itself. According to the degree in which the number thrown together exceeds the due proportion of space and air, disease and mortality ensue. It was the vitiated air alone which put out human life in the crowded hole of Calcutta. In a space somewhat enlarged, the effect would have been slower, but not less certain. In all confined situations, from the dungeon to the crowded workhouses, and from these to the compact population of overgrown cities, the atmosphere becomes, in corresponding degrees, unfitted by reiterated use, for sustaining human life and health: Were the atmosphere breathed in cities not diluted and displaced by fresh supplies from the surrounding country, the mortality would soon become general. Were the surrounding country thickly peopled and not refreshed in like manner, the decay of health, though a later, would be a necessary consequence. And were the whole habitable earth covered with a dense population, wasteful maladies might be looked for, that would thin the numbers into a healthy proportion.

Were the earth in every productive spot, and in every spot capable of being made productive, appropriated to the food of man; were the spade substituted for the plough, and all animals consuming the food of man, or food for which human food might be substituted banished from existence, so as to produce the maximum of population on the earth, there would be more than an hundred individuals for every one now upon it. In the actual population of many countries, it brings on occasional epidemics, to be traced to no other origin than the state of the atmosphere. Increase the numbers ten or twenty fold, and can it be supposed that they would at any time find the breath of life in a condition to support it: or if that supposition be admissable when limited to a single country, can it be admitted, when not only the contiguous countries, but the whole earth, was equally crowded?

Must we then adopt the opinion entertained by some philosophers, that no variation whatever in the numbers and proportions of the organized beings belonging to our globe, is permitted by the system of nature; that the number of species and of individuals, in the animal and vegetable empires, since they attained a destined complement, has been, and must always be, the same; that the only change possible, is in local augmentations and diminutions which balance each other, and thus maintain the established and unalterable order of things?

This would be the opposite extreme to that which has been rejected. Man, though so similar in his physical constitution to many other animals, is essentially distinguished from all other organized beings, by the intellectual and moral powers with which he is endowed. He possesses a reason and a will, by which he can act on matter organized and unorganized. He can, by the exercise of these peculiar powers, increase his subsistence, by which his numbers may be increased beyond the spontaneous supplies of nature; and it would be a reasonable conclusion, that making, as he does, in his capacity of an intelligent and voluntary agent, an integral part of the terrestrial system, the other parts of the system are so framed as not to be altogether unsusceptible of his agency, and unpliable to its effects.

This reasonable conclusion is confirmed by the fact, that the capacity of man, derived from his reason and his will, has effected an increase of particular plants and animals conducive to an increase of his own race; and a diminution of the numbers, if not of the species, of plants and animals displaced by that increase.

Most, if not all, our domesticated animals probably exceed the numbers which, without the intervention of man, would be their natural amount; whilst the animals preying on, or interfering with them, are proportionally reduced in their numbers.

The case is the same with cultivated plants.—They are increased beyond their natural amount; and banish or proportionally reduce such as interfere with them.

Nor can it be said that these changes, made by human art and industry in some regions, are balanced by corresponding changes made by nature, in other regions. Take for examples, the articles of wheat, rice, millet and maize, which are the chief food of civilized man; and which are now spread over such immense spaces. It is not possible to regard them, as occupying no more then their original and fixed proportions of the earth; and that in other parts of it, they have disappeared in the same degree in which they are thus artificially extended. These grains belong to the torrid and temperate zones only; and so great a portion of these zones have been explored, that it is certain, they could not have been displaced from other parts of the globe, in the degree in which they abound where they are now cultivated, and where it is certain

they owe their abundance to cultivation. There must consequently be an absolute increase of them produced by the agency of man.

Take more particularly for an example, the article of rice, which constitutes so large a portion of human food, The latitudes to which its growth is limited by the nature of the plant, are for the most part so well known, that it may be assumed for an unquestionable fact, that this grain cannot always have prevailed any where, in the extent in which it is now cultivated. And it is equally certain, that the vegetable productions belonging to the same climates, which must have been displaced by its cultivation, have not received an equivalent introduction and extension elsewhere.

It is remarkable that the vegetable productions, most extensively used as human food, are but little if at all found in there indigenous state; whether that state be the same as their present one, or a state from which they were improveable into their present state. They seem indeed not likely to flourish extensively in situations not prepared by the hand of man. The potatoe, so recently brought into use, and now spreading itself over so great a surface, can barely be traced to a native state in the mountains of Chili; nor can it be believed that previous to its adoption by man, it ever existed in the extent to which cultivation is now carrying it.

These views of the subject seem to authorize the conclusion, that although their is a proportion between the animal and vegetable classes of beings on our globe, and between the species in each class, with respect to which nature does not permit such a change as would result from a destruction of the animals and vegetables not used by man; and a multiplication of the human race, and of the several species of animals and vegetables used by it, sufficient to fill up the void; yet that there is a degree of change which the peculiar faculties of man enable him to make, and by making which his fund of subsistence, and his numbers may be augmented; there being at the same time, whenever his numbers, and the change, exceed the admitted degree, a tendency in that excess to correct itself.

Could it however be supposed that the established system and symmetry of nature required the number of human beings on the globe to be always the same; that the only change permitted in relation to them, was in their distribution over it, still as the blessing of existence to that number would materially depend on the parts of the globe on which they may be thrown; on the degree in which their situation may be convenient or crowded; and on the nature of their political and social institutions, motives would not be wanting to obtain for our portion of the earth its fullest share, by improving the resources of human subsistence, according to the fair measure of its capacity—For, in what other portion of equal extent will be found climates more friendly to the health, or congenial to the feelings of its inhabitants? In what other, a soil yielding more food with not more labor? And above all, where will be found institutions equally securing the blessings of personal independence, and of social enjoyments? The enviable condition of the people of the United States is often too much ascribed to the physical advantages of their soil and climate, and to their uncrowded situation. Much is certainly due to these causes —but a just estimate of the happiness of our country, will never overlook what belongs to the fertile activity of a free people, and the benign influence of a responsible government.

In proportion as we relax the hypothesis which makes the aggregate number of mankind unsusceptible of change, and believe that the resources of our country may not only contribute to the greater happiness of a given number, but to the augmentation of the number enjoying a greater happiness, the motives become stronger for the improvement and extension of them.

But, whilst all are sensible that agriculture is the basis of population and prosperity, it cannot be denied that the study and practice of its true principles have hitherto been too generally neglected in the United States; and that this state has at least its full share of the blame. Now only, for the first time, notwithstanding several meritorious examples of earlier date, a general attention seems to be awakened to the necessity of a reform. Patriotic societies, the best agents for effecting it, are pursuing the object with the animation and intelligence which characterize the efforts of a self governed people, whatever be the objects to which they may be directed.

Among these promising institutions, I cannot glance at all the names of those composing that of Albemarle, without being assured, that its full quota of information will be furnished to the general stock. I regret only, that my own competency bears so little proportion to my wishes to co-operate with them. That I may not be thought, however, deficient in good will, as well as in other requisites, I shall venture on the task, a task the least difficult, of pointing out some of the most prevalent errors in our husbandry, and which appear to be among those which may merit the attention of the society, and the instructive examples of its members.

I. The error first to be noticed is that of cultivating land, either naturally poor or impoverished by cultivation. This error, like many others, is the effect of habit, continued after the reason for it has failed. Whilst there was an abundance of fresh and fertile soil, it was the interest of the cultivator to spread his labor over as great a surface as he could. Land being cheap and labor dear, and the land co-operating powerfully with the labor, it was profitable to draw as much as possible from the land. Labor is now comparatively cheaper and land dearer. Where labor has risen in price fourfold land has risen tenfold. It might be profitable, therefore, now to contract the surface over which labor is spread, even if the soil retained its freshness and fertility. But this is not the case. Much of the fertile soil is exhausted, and unfertile soils are brought into cultivation; and both co-operating less with labor in producing the crop, it is necessary to consider how far labor can be profitably exerted on them; whether it ought not to be applied towards making them fertile, rather than in further impoverishing them, or whether it might not be more profitably applied to mechanical occupations, or to domestic manufactures?

In the old countries of Europe, where labor is cheap and land dear, the object is to augment labor, and contract the space on which it is employed. In the new settlements taking place in this country, the original practice here may be rationally pursued. In the old settlements, the reason for the practice in Europe is becoming daily less inapplicable; and we ought to yield to the change of circumstances, by forbearing to waste our labor on land which, besides not paying for it, is still more impoverished, and rendered more difficult to be made rich. The crop which is of least amount, gives the blow most mortal to the soil. It has not

been a very rare thing to see land under the plough, not producing enough to feed the ploughman and his horse; and it is in such cases that the death blow is given. The goose is killed, without even obtaining the coveted egg.

There cannot be a more rational principle in the code of agriculture, than that every farm which is in good heart should be kept so; that every one not in good heart should be made so; and that what is right as to the farm, generally, is so as to every part of every farm. Any system therefore, or want of system, which tends to make a rich farm poor, or does not tend to make a poor farm rich, cannot be good for the owner; whatever it may be for the tenant or superintendant, who has transient interest only in it. The profit, where there is any, will not balance the loss of intrinsic value sustained by the land.

II. The evil of pressing too hard upon the land, has also been much increased by the bad mode of ploughing it. Shallow ploughing, and ploughing up and down hilly land, have, by exposing the loosened soil to be carried off by rains, hastened more than any thing else, the waste of its fertility. When the mere surface is pulverized, moderate rains on land but little uneven, if ploughed up and down, gradually wear it away. And heavy rains on hilly land, ploughed in that manner, soon produce a like effect, notwithstanding the improved practice of deeper ploughing. How have the beauty and value of this red ridge of country suffered from this cause? And how much is due to the happy improvement introduced by a member of this society, whom I need not name,* by a cultivation in horizontal drills with a plough adapted to it? Had the practice prevailed from the first settlement of the country, the general fertility would have been more than the double of what the red hills, and indeed all other hilly lands, now possess; and the scars and sores now defacing them would no where be seen.—Happily, experience is proving that this remedy, aided by a more rational management in other respects, is adequate to the purpose of healing what has been wounded, as well as of preserving the health of what has escaped the calamity. It is truly gratifying to observe how fast the improvement is spreading from the parent example. The value of our red hills, under a mode of cultivation which guards their fertility against wasting rains, is probably exceeded by that of no uplands whatever; and without that advantage they are exceeded in value by almost all others. They are little more than a lease for years.

Besides the inestimable advantage from horizontal ploughing, in protecting the soil against the wasting effect of rains, there is a great one in its preventing the rains themselves from being lost to the crop. The Indian corn is the crop which most exposes the soil to be carried off by the rains; and it is at the same time the crop which most needs them. Where the land is not only hilly, but the soil thirsty, (as is the case particularly throughout this mountainous range,) the preservation of the rain as it falls, between the drilled ridges, is of peculiar importance; and its gradual settling downwards to the roots, is the best possible mode of supplying them with moisture. In the old method of ploughing shallow, with the furrows up and down, the rain as well as the soil was lost.

III. The neglect of manures is another error which claims particular notice. It may be traced to the same cause with our excessive cropping. In the early stages of our agriculture, it was more convenient, and more profitable, to bring new land into cultivation, than to improve exhausted land. The failure of new land has long called for the improvement of old land; but habit has kept us deaf to the call.

Nothing is more certain than that continual cropping without manure, deprives the soil of its fertility. It is equally certain that fertility may be preserved or restored, by giving to the earth animal or vegetable manure equivalent to the matter taken from it; and that a perpetual fertility is not, in itself, incompatible with an uninterrupted succession of crops. The Chinese, it is said, smile at the idea, that land needs rest, as if like animals it had a sense of fatigue. Their soil does not need rest, because an industrious use is made of every fertilizing particle that can contribute towards replacing what has been drawn from it. And this is the more practicable with them, as almost the whole of what is grown on their farms is consumed within them. That a restoration to the earth of all that annually grows on it, prevents its impoverishment, is sufficiently seen in our forests, where the annual exuviæ of the trees and plants replace the fertility of which they deprive the earth. Where frequent fires destroy the leaves and whatever else is annually dropped on the earth, it is well known that the land becomes poorer: this destruction of the natural crop, having the same impoverishing effect, as a removal of a cultivated crop. A still stronger proof that an annual restoration to the earth of all its annual product will perpetuate its productiveness, is seen where our fields are left uncultivated and unpastured. In this case the soil, receiving from the decay of the spontaneous weeds and grasses more fertility than they extract from it, is for a time at least improved, not impoverished. Its improvement may be explained, by the fertilizing matter which the weeds and grasses derive from water and the atmosphere, which forms a nett gain to the earth. At what point, or from what cause, the formation and accumulation of vegetable mould from this gain ceases, is not perhaps very easy to be explained. That it does cease, is proved by the stationary condition of the surface of the earth in old forests; and that the amount of the accumulation varies with the nature of the subjacent earth, is equally certain. It seems to depend also on the species of trees and plants which happen to contribute the materials for the vegetable mould.

But the most eligible mode of preserving the richness, and of enriching the poverty of a farm, is certainly that of applying to the soil a sufficiency of animal and vegetable matter in a putrified state or a state ready for putrefaction; in order to procure which, too much care cannot be observed in saving every material furnished by the farm. This resource was among the earliest discoveries of men living by agriculture; and a proper use of it has been made a test of good husbandry, in all countries, ancient and modern, where its principles and profits have been studied.

Some farmers of distinction, headed by Tull, supposed that mere earth, in a pulverized state, was sufficient without manure for the growth of plants; and consequently that continued pulverization would render the soil perpetually productive; a theory which never would have occurred to a planter of tobacco or of Indian corn, who finds the soil annually producing less and less, under a constant pulverizing course. The known experiment of Van Helmont seemed to favor the opposite theo-

*Col. T. M. Randolph.

ry, that the earth parted with nothing towards the plants growing on it. If there were no illusion in the case, the earth used by him must at least have been destitute of vegetable mould: for in an experiment by Woodhouse, a garden mould was diminished in its weight by a plant which grew in it. And the latest chemical examinations of the subject coincide with the general opinion of practical husbandmen, that the substance of plants partakes of the substance of the soil.

The idea is indeed very natural that vegetable matter which springs from the earth, and of itself returns to the earth, should be one source at least of the earth's capacity to reproduce vegetable matter.

It has been asked, how it happens that Egypt and Sicily, which have for ages been exporting their agricultural produce, without a return of any equivalent produce, have not lost their reproductive capacity. One answer has been, that they have lost no small degree of it. If the fact be otherwise with regard to Egypt, it might be accounted for by the fertilizing inundations of the Nile. With regard to Sicily, there may be something in the system of husbandry, or some particular local circumstances, which countervail the continued asportation of the fruits of the soil. But it is far more probable, that the Island is less productive than it once was. It is certainly less of a granary for other countries now, than it was when it received that title from the ancient Romans.—And its population being diminished, the internal consumption must also be diminished. If a single farm is rendered less productive by a continued removal of its crops, without any adequate returns, no reason occurs why it should not happen to a number of farms multiplied to the extent of a whole country.

And that individual farms do lose their fertility, in proportion as crops are taken from them, and returns of manure neglected, is a fact not likely to be questioned.

If it were, Virginia, unfortunately, is but too capable of furnishing the proofs. Her prevailing crops have been very exhausting, and the use of manures has been particularly neglected.

Tobacco and Indian corn, which for a long time, on the east side of the Blue Mountains, were the articles almost exclusively cultivated, and which continue to be cultivated, the former extensively, the latter universally, are known to be great impoverishers of the soil. Wheat, which has for a number of years, formed a large portion of the general crop, is also an exhausting crop. So are rye and oats, which enter occasionally into our farming system.

With so many consumers of the fertility of the earth, and so little attention to the means of repairing their ravages, no one can be surprized at the impoverished face of the country; whilst every one ought to be desirous of aiding in the work of reformation.

The first main step towards it, is to make the thieves restore as much as possible of the stolen fertility. On this, with other improvements which may be made in our husbandry, we must depend for the rescue of our farms from their present degraded condition.

Of tobacco not a great deal more than one half of the entire plant is carried to market. The residue is an item on the list of manures; and it is known to be in its quality a very rich one. The crop of tobacco, however, though of great value, covers but a small proportion of our cultivated ground; and its offal can, of course, contribute but inconsiderably to the general stock of manure. It is probable also, that what it does contribute, has been more carefully used as a manure, than any other article furnished by our crops.

The article which constitutes our principal manure, is wheat straw. It is of much importance, therefore, to decide a right on the mode of using it. There are three modes:—1. Carrying it from the farm yard, after having passed through, or being trodden and enriched by cattle. In that mode, the greater part of it must be used, if used at all; the straw going thro' that process, being a necessary part of the food allotted to the cattle. To derive the full advantage from it, it ought to be hauled out before the substance has been wasted by rain, by the sun, and by the wind; and to be buried in the earth as soon after as possible. 2. Spreading the straw on the surface of the ground. Many respectable farmers are attached to this mode, as protecting the soil from the sun; and by keeping it moist, favoring the vegetation underneath, whether spontaneous or artificial; whilst the straw itself is gradually decomposed into a manure. The objection to this mode, is the loss by evaporation, before this last effect is obtained. 3. Turning the straw at once under the surface of the earth. This would seem to be the best mode of managing manures generally; least of their substance being then lost. When the grain is trodden out from the straw, it is left in a state easily admitting this operation. Some difficulty may attend it, when the grain is threshed from the straw, by the flail, or by the machines now in use, neither of which break the straw sufficiently to pieces.

It may be remarked with regard to this article of manure—1. That its weight is barely more than that of the grain.—2. That the grain is the part which makes the greatest draft on the fertility of the earth. 3. That the grain is for the most part not consumed within the farm. It is found on trial that a stalk of wheat, as generally cut, including the chaff, and the grains borne by the stalk, are pretty nearly of equal weight. The case is probably the same with rye, and not very different with oats. The proportion of fertilizing matter in the straw, to that in the grain, has not, as far as I know, been brought to any satisfactory test. It is, doubtless, much less in the straw, which alone, in the case of wheat, is with us returnable in any form to the earth. This consideration, whilst it urges us to make the most of the article as a manure, warns us of its insufficiency.

The stubble, and the roots of the small grains, not being taken from the earth, may be regarded as elapsing into a fertility equal to that of which they deprived the earth. This remark is applicable to all cultivated plants, the roots of which are not an esculent part.

An eminent citizen and celebrated agriculturist† of this state has, among other instructive lessons, called the public attention to the value of the corn stalk as a manure. I am persuaded that he has not overrated it. And it is a subject of agreeable reflection, that an article which is so extensively cultivated as that of Indian corn, and which is so particularly exhausting, should be the one so capable of repairing the injury it does. The cornstalk as a fodder is of great value. Not only the leaves, but the husk inclosing the ear, and the cob enclosed by it, are all more or less valuable food when duly preserved and dealt out to cattle. There is no better fodder than the leaves or blades for

†Col. John Taylor.

horses and oxen; nor any so much approved for sheep, the husk or shruck is a highly nourishing food for neat cattle. And the pickings of the stock, even at a late season, and after much exposure to the weather, support them better than any of the straws. From the saccharine matter in the stock, which is long retained about the joints, it cannot be doubted that if cut early, or before exposure to the weather, into parts small enough for mastication, it would well repay, as a food for cattle, the labor required for it.

The great value of the cornstalk, in all its parts, as a fodder, was brought into full proof, by the use made of it, during the late general failure of crops. It is to be hoped that the lesson will not be suffered to pass into oblivion.

But it is as a resource for re-fertilizing the soil, that the cornstalk finds the proper place here; and as such it merits particular notice, whether it be passed through animals, or be prepared by fermentation in the farm yard; or be merely spread on the surface of the earth, the mode in which its effects must be least considerable. The same qualities which render every part of it nutricious to animals, render it nutricious to the earth; and it is accompapanied with the peculiar advantages—1. That the grain itself is mostly every where, and altogether, in places distant from navigation, consumed within the farms producing it. 2. That as the grain is in greater proportion to the space on which it grows than most other grains, so the rest of the plant is in greater proportion to the grain, than the rest of any other grain-plant. The straw and chaff of the smaller grains, as already remarked, is in weight but about one half of the grain. The cornstalk, with all its appurtenant offal, is of less than three times, and if taken early from the field, probably of not less than four or five times the weight of the grain belonging to it. 3. The fertilizing matter contained in the cornstalk is greater in proportion to its weight, than that contained in the straw and offal of other grains is to the weight of the straw and offal.

Would it be hazarding too much to say, that where a level surface, or the mode of cultivating a hilly one, prevents the rains from carrying of the soil, a restoration of an entire crop of Indian corn, in the form of manure, to the space producing it (there being no other intervening crop not so restored) would replace the fertility consumed by the crop; and maintain a perpetual productiveness?—Reason, the case of forest and fallow fields, where the spontaneous crop falls back of itself on the earth, and the Chinese example, where the cultivated crop is restored to the earth, all pronounce that such would be the effect. And yet the fact stares us in the face, that our most impoverished fields, even the most level of them, owe their condition more to the crops of Indian corn, than to any other crops.

The cotton plant, which is so extensive a crop, in the more southern and the south western states, is but little cultivated in Virginia, and scarcely at all in this part of it. I am not able to say how far it is comparatively an exhausting crop. But it would seem to be more capable than any crop, not wholly consumed within the farm, of preserving its fertility. The only part of the plant carried away, is the cotton fibre, or wooly part, which bears an inconsiderable proportion to the other parts in weight, and, as may be inferred, in fertilizing matter also. The seed alone, passing by the ball and haulm, is of three times its weight and contains the chief part of the oil in the plant. In the countries where cotton makes the principal part of the crop, the superfluous seed must deserve great attention as a manure. Where the fields are level or cultivated in horizontal drills, it might go far towards supporting a continued cropping, without a diminished fertility.

The sum of these remarks on cultivating poor land, and neglecting the means of keeping or making land rich is, that if every thing grown on a soil is carried from it, it must become unproductive, that if every thing grown on it, be directly or indirectly restored to it, it would not cease to be productive; and, consequently, that according to the degree in which the one or the other practice takes place, a farm must be impoverished, or be permanently productive and profitable. Every acre made by an improved management to produce as much as two acres, is in effect the addition of a new acre; with the great advantages, of contracting the space to be cultivated, and of shortening the distance of transpotation between the fields, and the barn or the farm yard. One of the Roman writers* on husbandry, enforces the obligation to an improving management by a story of one Paridius, who had two daughters and a vineyard: when the elder was married, he gave her a third part of the vineyard: notwithstanding which, he obtained from two thirds the same crop as from the whole: when his other daughter was married, he portioned her with the half of what remained, and still the produce of his vineyard was undiminished. The story, short as it is, contains a volume of instruction.

The plaster of gypsum, though not a manure within the farm itself, has been too long neglected, as a fertilizing resource. It is now beginning to take a high and just rank as such. The proofs of its efficacy are as incontestible as the causes of it are obscure. The experiments of a very distinguished chemist† led him to the opinion that its substance enters into the substance of the plant. Without doubting the fact, it does not sufficiently account for the addition made to the size and weight of the plant, which greatly exceed the quantity of the plaster. It must therefore have some further mode of operating. Whether it be by neutralizing some noxious ingredient in the earth, one of the modes by which lime is supposed to operate; or by attracting and conveying to the plant, food from the earth, the air, or water, or by exciting the plant to a more active use of its feeding powers, whatever they be; or by its accretion assimilation to the particular parts of plants on which these powers depend, thereby augmenting and strengthening those particular parts, and enabling the feeding powers to give proportional augmentation to every other part; whether by any one or more of these processes, or by some other or others distinct from them all, the growth of plants be promoted by this mineral, remains it would seem to be yet explained. In the mean time, a more extensive use of it promises much advantage to our agriculture. I take it, however, that this advantage cannot be permanent without making the increased product of the soil a source of manure to the soil. That the effect of the plaster will be continued indefinitely, under a constant removal of the whole crop from the soil, surpasses belief. It can scarcely fail to exhaust, at length, the productive powers of the earth. The period of time necessary for the purpose may be uncertain; but that, as in the case of the other mineral

*Columella.

†Sir H. Davy.

manures, lime and marle, such must sooner or later be the result, cannot well be so. The effect of pulverizing the earth by tillage, as practised by Tull, is stated to have been uninterrupted crops of wheat, without manure, for more than twenty years; which was regarded as a demonstration that tillage was a complete substitute for manure. Supposing the statement to be free from error, the inference is certainly not warranted by the fact. We know that some of our soils not naturally richer than the highly manured soils on which Tull probably commenced his tillage, will bear a succession of crops for an equal period; and we know as well, that their fertillity will not hold out forever. How long plaster, whatever be its mode of operation, will hold out, may not yet have been fully tried. But to make it permanently successful, it will be wise to take for granted, that it must be made a source of future manure, as well as of immediate productiveness. If the crop, as augmented by the plaster, be given back to the soil, the soil may be benefited more than it would be, by the return of a crop not augmented by the plaster. And in this way fertility may be accelerated. The restoration of a crop, increased by ordinary cultivation, to the soil on which it grew, would, I presume, fertilize it more than the restoration of a smaller crop spontaneously produced; although in both cases, the whole taken from the soil would return to it.

IV. Among the means of aiding the productiveness of the soil, which have not received merited attention, is irrigation. In scarcely any country does this resource abound more than in the United States; nor is there any, where there is so little sensibility to its value. The inconsiderable use made of it is chiefly by emigrants, particularly Germans, or the immediate descendants of them. I have understood that the market of Baltimore has been much benefited in dry seasons by the irrigation introduced by exiles from St. Domingo. For a distinguished proof of the importance of the practice, I may refer to the fact which has been stated, that in the neighborhood of Barcelona in Spain, where a part of the land is under irrigation, and a part is not susceptible of it, both being otherwise of equal fertility, the part irrigated is of double price in the market. It is to be noted indeed that the climate is a dry one, and that the article cultivated is Lucerne. And this a plant which, though much aided in its growth by moisture, is at the same time remarkable for the length of a tap root and fitted by that as well as by the absorbent quality of its leaves, to flourish in a thirsty soil, and warm climate. Our particular district of country, abounding in springs, small streams, and suitable declivities, admits greatly of irrigation; and being generally of a thirsty nature, the more strongly invites the use of it.

I cannot but consider it as an error in our husbandry, that oxen are too little used in place of horses.

Every fair comparison of the expense of the two animals, favors a preference of the ox. But the circumstance particularly recommending him, is that he can be supportd when at work, by grass and hay; whilst the horse requires grain and much of it; and the grain generally given him, Indian corn, the crop which requires most labor, and greatly exhausts the land.

From the best estimate I have been enable to form, more than one half of the corn crop is consumed by horses, including the ungrown ones; and not less than one half, by other than pleasure horses. By getting free from this consumption, one half the labor, and of the wear of the land, would be saved, or rather more than one half; for on most farms, one half of the crop of corn grows on not more than two fifths, and sometimes a smaller proportion of the cultivated fields; and the more fertile fields would of course be retained for cultivation. Every one can figure to himself the ease and conveniency of a revolution which would so much reduce the extent of his cornfields; and substitute for the labor bestowed on them the more easy task of providing pasturage and hay.

But will not the ox when kept at hard labor require grain food as well as the horse? Certainly much less, if any. Judging from my own observation, I should say, that a plenty of good grass or good hay, will suffice without grain, where the labor is neither constant nor severe. But I feel entire confidence in saying, that a double set of oxen alternately at work, and therefore half the time at rest, might be kept in good plight without other food than a plenty of grass and good hay. And as this double set would double the supply of beef, tallow and leather, a set off is found in that consideration for a double consumption of that kind of food.

The objections generally made to the ox, are—1. That he is less tractable then the horse. 2. That he does not bear heat as well. 3. That he does not answer for the single plough used in our corn fields. 4. That he is slower in his movement.—5. That he is less fit for carrying the produce of the farm to market.

The first objection is certainly founded in mistake. Of the two animals, the ox is the more docile. In all countries were the ox is the ordinary draught animal, his docility is proverbial. His intractability, where it exists, has arisen from an occasional use of him only with long and irregular intervals; during which the habit of discipline being broken, a new one is to be formed.

The 2d odjection has a little foundation. The constitution of the ox accommodates itself, as readily as that of the horse, to different climates—Not only in ancient Greece and Italy, but through out Asia, as presented to us in ancient history, the ox and the plow are associated. At this day, in the warm parts of India and China, the ox, not the horse, is in the draught service. In every part of India the ox always appears even in the train of her armies. And in the hottest parts of the West Indies, the ox is employed in hauling the weighty produce to the sea ports. The mistake here, as in the former case, has arisen from the effect of an occasional employment only, with no other than green food. The fermentation of this in the animal heated by the weather, and fretted by the discipline, will readily account for his sinking under his exertions; when green food even, much less dry, with a sober habit of labor, would have no such tendency.

The 3d odjection also is not a solid one. The ox can by a proper harness be used singly as well as the horse, between the rows of Indian corn; and equally so used for other purposes. Experience may be safely appealed to on this point.

In the fourth place, it is alledged that he is slower in his movements. This is true, but in a less degree, than is often taken for granted. Oxen that are well chosen for their form, are not worked after the age of about 8 years, (the age at which they are best fitted for beef,) are not worked too many together, and are suitably matched, may be kept to nearly as quick a step as the horse. May I not say a step quicker than that of many of the horses we see at work, who on account of their age, or the

leanness occasioned by the costliness of the food they require, lose this advantage, where they might have once had it?

The last objection has most weight. The ox is not as well adapted as the horse to the road service, especially for long trips. In common roads, which are often soft, and sometimes suddenly become so, the form of his foot, and the shortness of his leg, are disadvantages; and on roads frozen, or turnpiked, the roughness of the surface in the former case, and its hardness in both cases, are inconvenient to his cloven hoof. But where the distance to to market is not great, where the varying state of the roads and of the weather can be consulted; and where the road service is in less proportion to the farm service, the objection is almost deprived of its weight. In cases where it most applies, its weight is diminished by the consideration, that a much greater proportion of service on the farm may be done by oxen, than is now commonly done; and that the expense of shoing them is little different from that of keeping horses shod. It is observable, that when oxen are worked on the farm, over rough frozen ground, they suffer so much from the want of shoes, however well fed they may be, that it is a proper subject for calculation, whether true economy does not require of them that accommodation, even on the farm as well as for the horses.

A more important calculation is, whether, in many situations, the general saving by substituting the ox for the horse, would not balance the expense of hiring a carriage of the produce to market. In the same scale with the hire, is to be put the value of the grass and hay consumed by the oxen; and in the other scale, the value of the corn, amounting to one half of the crop, and of the grass and hay consumed by the horses. Where the market is not distant, the value of the corn saved would certainly pay for the carriage of the market portion of the crop, and balance moreover any difference between the value of the grass and hay consumed by oxen, and the value of the oxen when slaughtered for beef. In all these calculations it is, doubtless, proper not to lose sight of the rule, that farmers ought to avoid paying others for doing what they can do themselves. But the rule has its exceptions; and the error, if it be committed, will not lie in departing from the rule, but in not selecting aright the cases which call for the departure. It may be remarked, that the rule ought to be more or less general, as there may or may not be at hand, a market by which every produce of labor is convertible into money. In the old countries this is much more the case than in the new; and in the new, much more the case near towns, than at a distance from them. In this, as in most other parts of our country, a change of circumstances is taking place, which renders every thing raised on a farm more convertible into money than formerly; and as the change proceeds, it will be more and more a point for consideration, how far the labor in doing what might be bought, could earn more in another way, than the amount of the purchase. Still it will always be prudent, for reasons which every experienced farmer will understand, to lean to the side of doing, rather than hiring or buying, what may be wanted.

The mule seems to be, in point of economy, between the ox and the horse; preferable to the latter, inferior to the former; but so well adapted to particular services, that he may find a proper place on many farms. He is liable to the objection which weighs most against the ox. He is less fitted than the horse for road service.

V. A more manifest error in the husbandry of the older settlements, is that of keeping too many neat cattle on their farms. As a farm should not be cultivated farther than it can be continued in good heart: the stock of cattle should not be in greater number than the resources of food will keep in good plight. If a poor farm be unprofitable, so are poor cattle. It is particularly the case with the milch cows. When the whole of the food given them is necessary to support a lean existence, no part can be spared for the milk pail. The same food given to the proper number, will not only keep them in a thrifty state, but enable them to supply the dairy. Even the manure from several poor cattle is worth less than that from a single fat one. The remark holds equally good with respect to the hide.

The misjudged practice in question is another effect of inattention to the change of circumstances through which our country has passed. Originally the forest abounded in rich herbage which fed and fatted, without expense, all the cattle that could be brought through the winter into the spring. It was natural at that time to keep as large a stock as could be preserved through the winter. For a long time past, the forest is scarcely any where a resource for more than two or three months; and in many places, no resource at all. A greater difficulty is often felt in finding summer, than winter subsistence. And yet where no inclosed pasturage is provided to take the place of the extinct one in the forest, the habit, founded in reasons which have entirely ceased, is but too generally retained. The same number of cattle is aimed at, as if the forest was as ready to receive and fatten them now as formerly. The size and appearance of our neat cattle, compared with those for which nature or good husbandry has provided sufficient food, are proofs that their food is not in proportion to their number; and that where the food cannot be increased, the number ought to be reduced.

VI. Of all the errors in our rural economy none is perhaps so much to be regretted, because none is so difficult to be repaired, as the injudicious and excessive destruction of timber and firewood. It seems never to have occurred that the fund was not inexhaustible, and that a crop of trees could not be raised as quickly as one of wheat or corn.

Here again we are presented with a proof of the continuance of a practice for which the reasons have ceased. When our ancestors arrived, they found the trees of the forest the great obstacle to their settlement and cultivation. The great effort was of course to destroy the trees. It would seem that they contracted and transmitted an antipathy to them: for the trees were not even spared around the dwellings, where their shade would have been a comfort, and their beauty an ornament; and it is of late years only, that these advantages have been attended to. In fact such has been the inconsiderate and indiscriminate use of the axe, that this country is beginning to feel the calamity as much as some of the old countries of Europe; and it will soon be forced to understand the difficulty of curing it. A vast proportion of the farms on the eastern side of the Blue Ridge, and some even on the other side, have but a scanty fund for present use, and are without a fund for permanent use. And to increase the evil, the remnant of timber and fuel on many farms, inadequate as it is, is left in situations remote from the dwelling, and incapable of being divided, according to the divisions and

subdivisions into which all the larger farms must be rapidly forced by the law of descents, the impulses of parental affection, and other causes.

It is high time for many farmers, even in this quarter, and still more so in the country below us, to take this subject into serious consideration. Prudence will no longer delay to economize what remains of woodland; to foster the second growths where taking place in convenient spots; and to commence, where necessary, plantations of the trees recommended by their utility and quickness of growth.

I wish I could more satisfactorily estimate the proportion of woodland which ought to belong to every farm, as a permanent fund of timber for building and repairing houses; for fences, where live or stone ones may not be introduced; for wheel carriages, and the other apparatus needed on farms. The estimate is the more difficult, because it must be varied according to many circumstances; particularly, according to the nature of the soil and the kind of trees at once suited to it, and to the uses to be made of them.

Estimating the crop of wood, yielded by an acre, at twenty cords, the period of reproduction at twenty years, and the average number of cords annually consumed at a fireplace, including the culinary consumption, at ten cords, every fire-place on a farm will require ten acres for a permanent supply of fuel. For the other necessities of a farm several acres more ought to be added.

An estimate in a very sensible publication, entitled "The New England Farmer," makes seventeen acres necessary for a fire-place. The winters there are longer, and the climate may be less favorable to the quick growth of trees. But their houses are generally closer than with us; to say nothing of a more judicious management than can be enforced on most of our farms.

To this catalogue of errors in our rural economy, considerable as it is, many I fear might be added. The task of pointing them out, I gladly leave to others, less incapable than I have shewn myself to be, by the very imperfect manner in which I have performed the one on which I ventured.

North Carolina.

Report of the president and directors of the Cape-Fear navigation company to the stockholders in general meeting, on the 2d day of Inly, A. D. 1818.

At the last general meeting of the stockholders, a hope was entertained that the obstructions in the river between Wilmington and Fayetteville could be removed before this time; and to realize this hope, a superintendant of the works was engaged, and instructions given to him to employ as large a force as could be worked to advantage—He was also directed to have made, without delay, such additional flats and machinery for raising and clearing away logs, &c. as might be necessary. In following these instructions, the superintendant has had due regard to the state of the river, which for more than one half of the year has rendered it impossible to work, even the hands belonging to the company, to such advantage; and instead of removing all the obstructions between Wilmington and Fayetteville, only forty-five miles of the river have been well cleared. The work which has been done has facilitated the passage of boats, and trips can now be made from Fayetteville to Wilmington and back, with much more safety and within less time by one or two days, than formerly. The obstructions in the river, disclosed to view in its present low state, are so numerous, that the president and directors forbear to give any opinion as to the time which will be required to remove them. Should the river continue low, a strong force may be employed, much work may be done, and probably by the commencement of the next year, the principal obstructions may be removed. The increasing trade of the Cape Fear, and the preparations making for running steam boats on its waters, have greatly increased the solicitude of the president and directors for its speedy and effectual improvement; and they regret that the almost continued flood in the river, since their appointment, has put it out of their power to gratify their own wishes or meet the expectations of the stockhloders.

Preparations have been made for improving the navigation of the river above Fayetteville; and if the stockholders sanction the undertaking, a great part of this work may be done in the course of the succeeding year. The president and directors are of opinion, that the operations of the company should hereafter be carried on upon a much larger scale than they have been heretofore—and, that the work may keep pace with public opinion and the improvements of other sections of the state, power should be given to make loans in anticipation of the instalments authorised by the charter to be called for.—Many reasons growing out of the present state of North Carolina, will present themselves to the stockholders, why the improvement of the river, Cape Fear and its waters, should be pushed forward with despatch; and why the work, which ought to be done in one year, should not be made the business of five years.

In obedience to the resolution of the stockholders at their last general meeting, the president and directors have attended to the project of opening a communication by water from the town of Fayetteville to the river. They have examined different plans, and have thus far met with such difficulties attending each as to prevent any thing from being done. They are decidedly of opinion, that it is expedient to open this communication as soon as the difficulties attending its execution can be surmounted. The contemplated improvement in the town of Fayetteville should keep pace with the improvement of the river above, that boats descending the river may be enabled to enter the town and discharge their cargoes near the market. With a view of forwarding these improvements, when their plan shall be determined, fourteen acres of ground, including a section of Blount's Creek, have been purchased for the company.

An opportunity lately offered of purchasing for the company, eighty shares of Newbern and the like number of Cape Fear bank stock, at a premium of fifteen per cent. This purchase was thought to be advisable, as the money then on hand could not be used, owing to the continued flood in the river; and as the purchase did not diminish the funds of the company, except to the amount of the premium paid, inasmuch as the directors might fairly presume that they could at any time, by pledging the stocks with the banks, command the amount thereof in money.

H. BRANSON, *president.*
A. D. MURPHY,
JOHN CLARK,
HUGH CAMPBELL,
P. J. TILLINGHAST, jr. } *Directors.*

Illegitimate Rag Manufactures.

Since our last, we have the following intelligence of the progress and effects of the "paper system:

A notice of the conviction of four persons, at Batavia, in New York, for passing counterfeit notes —sentenced to seven or eight years hard labor in the state prison.

The Utica (N. Y.) Gazette of the 7th inst. says —On Saturday, last two men, by the names of William Orr, jun. and Ezekiel Clark, were arrested at Whitesboro', on a charge of passing counterfeit money, and after undergoing an examination before J. B. Pease, esq. were committed for trial.—On the examination it appeared that Clark had passed a counterfeit bill of $5, of the New York State bank, to a woman in Whitesboro', and a counterfeit bill of $3 was found upon him.——The following connterfeit bills were found upon Orr, to wit:

Bills.	*dolls.*	
3 of	50, on the Manufacturers' and Mechanics' Bank, Boston,	$150
14 of	20, Bank of Baltimore,	280
12 of	20, Merchants' Bank of city of New York,	240
42 of	10, Bank of Baltimore,	420
46 of	5, Bank of Alexandria,	230
112 of	5, Bank of Pennsylvania,	560
50 of	5, State Bank of Albany,	250
39 of	3, Miami Exporting Company,	117
20 of	3 Bank of Philadelphia,	60
87 of	2, Mechanics' and Farmers' Bank, Troy,	174
		$2481

Orr and Clark say they were from the county of Schoharie.

Augusta, July 1.—Yesterday two men were committed to the common jail of this county for issuing and passing counterfeit bank bills: the amount found in their possession was about $3000; consisting of 41 or 42 bills of fifty dollars each, on the bank of *Potomac*, in Alexandria, district of Columbia—67 of ten dollars each on the *Bank of the state of New York*, in the city of New York—and 17 of 2 dollars each, on the *State bank of N. Carolina*. These latter were so admirably executed, that the most rigid observer could only detect the imposture by a scrutinizing comparison with a genuine one of the same denomination. The others were clumsily executed; and it is said no such bank exists as the bank of the state of New York, in the city of New York.

On the same day a three dollar bill of the State bank of North Carolina, altered to a fifty, was taken from a person who offered it for exchange and deposited in the hands of a magistrate. Frauds of this kind are becoming quite frequent—the alteration, however, is awkardly made, and may be easily detected by holding up the bill to the light, when the impression of the original amount is readily discovered from the opposite side.

From the Ontario (N. Y.) Repository.

Phineas Eggleston was convicted of passing a note, and sentenced to imprisonment in the state prison for four years.

The case of Eggleston was we presume novel in our courts. A brief statement of the facts as they appeared in evidence on the trial, may be profitable to the public. From our recollection of the testimony, the prominent features of it were these: Eggleston was in the possession of a note of the bank of Niagara, which had been altered from one dollar to ten; that while in his possession, he had exhibited, and was informed that it had been so altered; that Eggleston, with this advice, that the note was not genuine, passed it as genuine ten dollar note. And although it appeared in evidence, on the part of the prisoner, that at the time of passing the note he informed the person to whom he passed it, that its genuineness had been disputed, and that if it should prove to be bad he would take it back; yet his honor the chief justice charged the jury, that if they were of opinion that Eggleston had sufficient intimation that the note was counterfeit to put him upon his guard against passing it as genuine, and that he did pass it as genuine, having good reason to believe it was false, they were warranted in presuming a felonious intent. The jury upon this testimony, under the charge of the court, after about 20 minutes absence, returned a verdict of *guilty*.

We have been induced to give the public this short history of Eggleston's case from a conviction that his conduct in passing the note, for which a jury of his country have found him guilty, is parallel to that of too many in the community, who, finding themselves in the possession of counterfeit money, for which they have paid the full denomination, take the first opportunity to pass it off, and that without so much as advising the receiver that suspicions have lit upon it. This playing "Robin's alive" with bad money, is often and dangerously practised by those who would revolt at the idea of being engaged in putting into circulation spurious paper, without reflecting that by continuing the circulation of such paper they operate a mischief to the community equally great. The duty of every man who is in the possession of money which he has reason to believe or suspect counterfeit, is obviously to suppress its circulation at once; and this fate of Eggleston will shew the danger to such as do otherwise.

The following petitions have been presented to the prince regent of England, on account of convictions for forgeries of bank notes———they severe ly strike at the heart but were unavailing:

"*May it please your royal highness*—Despairing of all other human help, a distracted wife prostrates herself at the feet of your royal highness, and most humbly, but pathetically, petitions for the relief of her husband, who now lies in Warwick gaol, under the awful sentence of death for forgery.—The unfortunate woman who presumes to apply at the fountain of mercy and goodness, though now overwhelmed by present and prospective calamity, is the daughter of the late colonel J. Rann, a man distinguished for his loyalty and patriotism, who, for the defence of his king and country, raised a regiment called the Birmingham Loyal Fencibles. Oh! gracious prince! save his family from the infamy of an ignominious death. Oh! save his daughter's life, and that of her unborn and innocent child, which hang upon the life of her husband. Great prince, look with an eye of compassion upon us, and permit me to state such reasons as will justify your royal highness in the dispensation of mercy to my poor husband. Think, royal sir, upon his youth and inexperience—only 22 years of age. Reflect, great sir, that this is the first offence; that by the accompanying testimony of his last employer, J. W. Wright, of Birmingham, while in his employ, " he conducted himself in a remarkably sober, industrious, and honest manner." Permit me to state to your royal highness, that when brought up for trial he repeatedly pleaded guilty, and was with difficulty and reluctance persuaded to retract his

plea; that others, equally guilty, who persisted in their plea, are recommended to mercy, while my husband, through his ignorance and agitation in the hour of trial, is left on the awful list of those who are to die. Oh! gracious prince! suffer not my poor husband's ignorance to prove fatal to him. Oh! grant him his life, and banish us to any part of the world, where we may hide our heads from the shame of general contempt. Oh! spare his life, gracious prince. Oh! suffer me not to be driven from this last hope! So may the petitions of your royal highness, in that hour which equally awaits the prince and peasant, meet with a blessed answer from the King of kings. Were my husband a man of cruelty and depravity, I would not dare pollute the sanctuary of your royal mind by exciting its sympathies for him; but when I reflect on his love and tenderness, and generosity to myself; when I further recollect, that it was his misguided love to me, and his anxiety to supply me with those comforts to which, in better days, I had been accustomed, which precipitated him into the crime for which he is doomed to die, I cannot help indulging the hope that your royal highness will stretch forth your benevolent hand, and snatch my poor husband from the jaws of death. And your petitioner will, as in duty bound, forever pray, &c.

FANNY GRAY."

To his royal highness the prince regent, &c. the most humble petition of ————:

"Sheweth—That at an age when judgment was imperfect and seduction strong, she was drawn from her father's house by the artifices of a villain.

"That, degraded by her crime in the estimation of her family, when the hour of repentance came, no friendly door invited her return.

"That her dependence on her seducer was increased, while his attention to her abated, and that in a distracted hour she purchased the continuance of his protection by a breach of the law.

"That her life must be forfeited for her crime, unless the contrition which she hopes has appeased her God, may obtain for her the compassion of her prince—And that she is not now more solicitous for life than her prayers shall ever be devout for the generous author of her pardon."

South American Affairs.

Capt. Stafford, of a Buenos Ayrean privateer, has captured off Cumberland Harbor, a piratical vessel and her prize, a large Spanish ship, with a cargo invoiced at $200.000.

The frigate Congress has arrived at Norfolk, from Buenos Ayres, with Messrs. Rodney snd Graham, two of the commissioners. Judge Bland had crossed the Andes, to Chili; as it appears was originally contemplated by our government, see the letter from the department of state, of March 2, 1818, page 99. Messrs. Rodney and Graham have reached the seat of government, and in due season we may expect a very interesting account of their mission, to which the more extended tour of Mr. Bland will make a very valuable appendix.

We gather from prevailing reports, that the government at *Buenos Ayres* appears to be as firmly fixed as any government can easily be, in a state of of revolution. Its various duties are discharged with regularity and order, and the people in general are making astonishing progress in a knowledge of the *rights of man*. They seem to be happy and contented, and to enjoy every degree of quiet and repose to be expected in a country in a state of war, and are hospitable, generous and humane. The great victory in Chili, gave the fullness of life to the people and the government; and the idea of ever submitting to foreign control was banished from the heart of every man, as a thing that it was impossible ever should be. This national feeling is a national strength.

The Ontario, capt. *Biddle*, with judge *Provost* on board, was still at Valparaiso, from the last accounts but upon the point of sailing, their stay having been longer than expected. The manly and liberal deportment of these gentlemen, during the gloomy and distressful period preceding the splendid victory of Maipu, has elicited the warm approbation of the merchants in Chili, as well natives as foreigners.—It is understood that she was about to proceed to the mouth of the Columbia river, which is claimed as within the limits of Louisiana, where there is an American settlement called Astoria. The frigate Macedonian will shortly visit the Pacific.

The Portuguese still hold Monte-Video, but cannot venture out to forage, except in strong bodies. Their army has been kept pent up in its fortifications by so small a force as 200 men. Artigas and the patriots of the Banda Oriental, wisely profiting by experience, have substituted for pitched battles, and regular military operations, that partizan warfare which rendered discipline (otherwise so formidable,) unavailing, places upon a footing of equality raw troops and regulars. The Portuguese in fact, hold no more of a country they have so unjustly invaded, than what they actually occupy with an armed force.

The Congress stopped at Margaretta and the intelligence there received was highly favorable to the patriot cause in Venezuela; and in direct variance with the accounts that lately reached us of royal successes.

Four regiments of British troops, with twenty five pieces of cannon and 1700 stand of arms, had recently arrived at Margaretta, as an auxiliary to the patriot army, and been sent to the Oronoke.—These regiments were all commanded by British officers. A fine sloop of war of 20 guns, also commanded by a lieutenant of the British navy, arrived there a few days before the Congress sailed, for the purpose of joining the squadron of admiral Brion, or otherwise co-operating with the patriot forces, as might be most desirable.

The patriot flag waved victorious wherever the Congress touched, and the idea of Spain ever being able to prostrate again the spirit of independence which animated all classes of society, was considered futile in the extreme—The respect and cordiality with which our commissioners were welcomed by the public authorities and people, at all the places which they visited, and the high estimation in which the character and institutions of our government were every where held, gave a strong assurance, that they properly appreciated the exalted privileges, for the maintenance of which they had embarked their lives and fortunes.

The yeomanry of the country are represented as a hardy independent race of people, and sufficiently intelligent for all the purposes of self-government—A love of liberty is zealously inculcated among the rising generation, and a martial spirit infused in their minds, which will be capable, if necessary, of seasonable application.

The war between Buenos Ayres and Artigas still continued. It was believed at Margaretta that Morillo was dead.

[The preceding is chiefly abstracted from the *Norfolk Beacon*.]

The passengers in a vessel from Porto Bello inform that an account of the capture of the Peruvian army in Chili had reached Panama previous to their leaving that place—they *talked* of raising another of 8 or 9000 men.

We learn from Margaretta that the crew of the Venezuelan brig India Libre had risen upon their officers, put them ashore, and carried off the vessel. She has since arrived in the Chesapeake, and from the suspicious proceedings of those who had charge of her, was taken possession of by the revenue cutter, and brought to Baltimore on Wednesday last.

FROM THE NATIONAL INTELLIGENCER.

Extracts from letters, dated Valparaiso, March 8.

"An English East Indiaman, of 44 guns, has just entered the port; she is said to be one of the vessels engaged by the agent of the patriots in England, and is of sufficient size to control the seas if well commanded. She is waiting the result of the engagement, to relieve the port from the blockade of the Spaniards, and to commence her operations."

April 9.

"On the 5th instant, after a severe and bloody contest, the royal army was entirely routed, I may say annihilated; 2000 were left dead on the field, 1500 prisoners, and a few are straggling about, who, together with the wounded, constituted the whole force of the enemy. San Martin, to deprive them of all means of escape, had decoyed Orsorio to advance within sight of the capital before he attempted resistance; the experiment was thought to be dangerous and disapproved by many; but he rejected all inteference, and has evinced his superiority. Chili is now emancipated, and, with the smallest attention to the three ports of Valparaiso, Coquimbo and Talcu, may be made inaccessible to any force which Spain can hereafter furnish.

"The Indiaman, of which I took notice in my letter of the 8th ult. was one of the vessels engaged in England for the use of the pataiots, but from the peculiar state of the country, on its arrival, the government could not complete its payment, and thus it has remained in the possession of the owner until within a few days past. She is now nearly ready for sea, and as soon as she is equipped it is intended to send her out to encounter the Spanish frigate blockading this port. The result, if successful, will insure the control of the sea, and enable the general to proceed forthwith to Lima, now wholly without protection, as it is said, and composed of a disaffected population. Whatever may be the course pursued, the present character of the ship, offers full protection to our countrymen, and enables us to proceed on our voyage, which we shall accordingly do on the day after to morrow. The address to capt. Biddle, of which I enclose a copy, will shew at home the great advantage resulting from the presence of the Ontario. I am gratified in being able to say, after a residence of nearly three months, that the impression first produced by the arrival of the Ontario, has been daily augmenting, and that the measure of the president has been the most happy in its result."

The following is the address to capt. *Biddle*, commanding the Ontario, referred to above:

To capt. James Biddle,

We, the undersigned, captains, supercargoes and agents of American ships now in the port of Valparaiso, think it incumbent on us to express to you in this manner, our warm acknowledgments of the very important services which you have rendered us, in the protection of our persons, and of the property of our constituents at a moment of uncommon danger.

There can be no doubt that the presence of your ship was the only safeguard we possessed against the attempts of the blockading squadron to take our ships out of the port, while they were under embargo, the consequence of which would have been the total loss of the property under your charge, and the subjection of our persons to imprisonment and every species of outrage.

Nor is this the only advantage which we have derived from your consent to remain here a longer time than, perhaps you had originally contemplated, for it is notorious that nothing but the representations of a dignified officer in the service of the U. States, to the government of this place, could have prevented the seduction of the seamen from our several ships, which before our arrival, took place to an extent, which left several ships absolutely in a state of distress.

The aid also which has always been promptly furnished by you, when required, and which was necessary to the safety of our ships, is a circumstance not to be forgotten; and although we still hope the same attention to our interest, we feel it incumbent upon us to express our sense of the obligations which the vigilance, activity and zeal which have been manifested by youself, your officers and ship's company, in affording us protection and assistance, have laid on us.

We flatter ourselves, that when it shall be known in the United States, that nearly a million of American property has been saved from certain condemnation, and many American citizens from oppressive imprisonment by your exertions, both our country and government will duly appreciate and reward your meritorious services.

With every wish, sir, for your prosperity and happiness, and every sentiment of respect and esteem, we remain, &c.

SOLOMON TOWNSEND,
Master and supercargo of the ship Lion, of Providence, R. I.
CHARLES S. CARY,
Master of ship Levant, of Boston.
JOHN HIGGINSON,
Supercargo of do.
CHARLES L. HYATT,
Master and joint supercargo of the ship Two Catharines of Providence.
HORATIO GERAULD,
Joint supercargo of do.
BENJAMIN VANDERFORD,
Master of ship Indus, of Salem.
H. PULLER,
Master of brig Ariel, of Boston.
DANIEL READ,
Master of brig America, of Philadelphia.
JOHN MILNER,
Supercargo of do.
THOMAS ROBINSON,
Of the ship Packet.
HENRY HILL.

Foreign Articles.

ENGLAND.

A British fleet, consisting of two 80's and six 74's is to assemble, to cruize for two months, for discipline.

A person is now in London, from America, with a view of hiring 200 laborers for himself and a Mr. Burbeck: he has only yet procured fifty, each being required to possess 25 pounds in money.

An incombustible store house has been completed in Plymouth dock yard, every part of which is composed of stone and iron, without an inch of wood in the whole building; the girders, joists, doors, sashes, and frames, are all of cast iron, neatly executed. The roof is also of cast iron, and the floors of Yorkshire stone; the stair case, which is a geometrical one, is of Moorstone, projecting six feet from the wall. The estimated expense of this novel building is 15,000*l.*

The following list of the titles of lord Wellington, from the *Extraordinary Red book*, is equal to any thing that a *Castilian* can boast of—"Wellington, Arthur Wellesley, duke of, marquis of Douro, field marshall and colonel of the regiment of horse-guards, ambassador extraordinary and plenipotentiary to the court of France, and a privy counsellor in Ireland, prince of Waterloo, and a field marshall in the Netherlands, duke of Ciudad Rodrigo, grandee of the highest class, and a captain general in Spain, duke of Villonia, and marshall general in Portugal, K. G. G. C. B. R. G. F. R. S. F. R. M. T. R. S. G. C. B. E. R. S. K. T. S. K. W. K. E. K. C. R. K. F. and D. C. L."

Princess Charlotte—An ingenious writer, in speaking of the death of the late lamented princess Charlotte, introduces some singular coincidences with respect to the letter C. Her mother's name is Caroline—her own was Charlotte—that of her consort Coburg—she was married at Carlton House—her town residence was Camelford House—the late owner of which, lord Camelford, was untimely killed in duel—her country residence was Claremont—not long ago the property of lord Clive, who terminated his own existence—She died in child-bed—and the name of her accoucheur was Croft, who lately committed suicide in a fit of desperation.

FRANCE.

Extract of a letter, dated Paris, May 18.

There has happened lately, at Fontainbleau, an event which causes great sensation, and which every body relates after his own manner. The following is an exact account of it:—The regiment of chasseurs of the royal guard is in garrison, in this town. A farrier belonging to this corps, probably drunk, was heard to exclaim *vive l'empereur!* The colonel, count de Potier, ordered him to be immediately arrested, which was perfectly just; but he afterwards ordered him to be taken to the middle of the forest of Fontainbleau, and there whipped to death with leather thongs, which was atrocious barbarity. The unfortunate man was undergoing this horrible punishment, but from a sentiment of pity, the lieut. colonel, baron Morier, had him conveyed to the hospital, still alive! M. de Potier was in a fury, because his order had not been *entirely executed*, and put under arrest his lieut. colonel. This was the state of affairs a few days ago, when baron Montelegier, aid-de-camp to the duke of Berry, was sent to the place for the purpose of investigating the matter.

BRITISH AMERICA.

From the 25th to the 29th June, 501 settlers arrived at the port of Quebec from Europe. The whole number that have arrived there this season, since the river St. Lawrence has been free of ice and navigable for shipping, is stated in the Quebec gazette at 2378. The same paper informs us, that several thousand Scotch Highlanders have formed an association for the purpose of emigrating to Canada, and were to have sailed from Greenock in the month of May.

CHRONICLE.

The Washington City Gazette, presumes that business of moment may be under consideration, because there are at present at the seat of government—the president of the United States; the secretaries of state, of the treasury and of war; and the ministers of France, England, Spain and Holland.

Eastport was surrendered, in ample form, to gen. Miller, by the British authorities, on the 30th ult. The general then congratulated col. Sargeant, agent of the state of Massachusetts, on the restoration of its sovereignty over the islands in the bay of Passamaquoddy.

Small difference! Dr. John H. Robinson's new map of Louisiana and Mexico is noticed in a Natchez newspaper. The boundary lines of the territorial claims of the United States and Spain are marked on this map. The tract of countries lying between the extreme extent of country so claimed, is estimated to contain *one thousand and twenty-four millions, 982 thousand acres!*

Mr. *Robertson*, representative in congress from Louisiana, has declined another re-election, on account of ill health. He has been a most able advocate of the best interests of his country, and his loss will be severely felt in the national councils.

Toast drank in Massachusetts—"The old United States thirteen in number. Who can doubt their *union*, since they have had *seven children* added to their family, and have again spoken to the nurse."

Petersburg, Va. inspections, for April, May, and June, 1818—7541 *bbls* superfine; 331 do. fine; 666 do. cross middlings; 121 do. straight do.; 18 do. ship stuff.

Vermillion, of a very excellent quality and in quantity, is manufactured in New York.

Singular paper.—The editor of the Philadelphia Centinel states, that he has in his possession a supplement to the Prince of Wales' Island gazette, the paper of which is manufactured from rice. He describes it as being smooth, even and of a fine texture.

Boxing.—The police of New-York is very *unpolished*. A party of boxers, whose *science* may have excited the admiration of princes and priests in England, having assembled for the purpose of pounding one another, and perhaps of murdering one another, as has often happened "at home," were rudely interrupted by a "sort of half Indian" magistrate, and informed that if they did not desist he would put the whole of the *gentlemen* in jail!

New-York, July 5.—During the violent thunder storm on Monday night, the steam-boat Nautilus was on her passage from Staten Island; and, altho' the wind was a hurricane, and the lightning a continual blaze around the boat, not the least injury was sustained, except that which resulted from the alarm excited among the numerous passengers, two of whom only, a lady and gentleman, fainted—they both happily recovered by the time the storm subsided.

Connecticut.—The election for members of a convention, to form a constitution, took place on the 4th instant. The result is thus stated—republican delegates, 111—federal, 90—rep. maj. 21.

Illinois. It is doubtful whether this territory, within the time limitted, will have the needful population (40,000) to entitle it to become a state. A census has just been taken—the aggregate of the returns is 34,620; but for one county no return had been received. The complete return will be published when it comes to hand.

Naval.—The Guerriere frigate has been ready for sea for more than a fortnight, and will sail as soon as Mr. Campbell pleases, after his arrival here, which was expected yesterday.—We believe she will be found one of the most effective ships of her class that ever entered the Baltic—carrying 53 guns, 24 pounders and 42 pound cannonades, with a full and complete crew, with numerous officers, and commanded by capt. Macdonough, on whose fame and skill his country delights to dwell; she will exhibit a superior equipment for war; as well as a most admirable specimen of naval architecture. She was provisioned for a two years cruise, fully repaired and manned in so short a time, as to reflect credit upon all branches of the naval service.

The destination of the frigate Macedonian, capt. Downes, we believe is yet a matter of uncertainty. She is not required to be ready before August, and will probably proceed to the Pacific Ocean; where the beneficial effects of the occasional visits of our ships of war, were lately shown, in the protection of nearly one million of American property in the port of Valpariso, afforded by the Ontario, captain Biddle.—*Boston paper*.

A prize to a patriot privateer, detected in smuggling on the southern coast, has been taken possession of by the revenue cutter Dallas.

Mitchell, the old offender, we presume, has recently committed several acts of piracy in the Mississippi, by boarding vessels in open row boats, and robbing them.

Whale fishery—It is stated in the Boston Gazette, that upwards of fifty ships are now absent from Nantucket on whaling voyages.

Events of the war!—Captain James Turner, of Bucksport, Maine, in the schr. "Eight Sisters," having 100 qtls. codfish on board, was taken by the British sloop Wye, capt. J. Harper, while fishing off Bryer Island, (Nova-Scotia) on the 15th of June last. The crew were put on board the Wye, but the captain was left on board the schooner which was carried into Digby. After lying there 12 days, one Thomas Saddler, prize-master, and three British seamen, were ordered on board, and proceeded with the schr. towards Halifax. On the night of the 28th June, capt. Turner carefully secured the fire arms and cutlasses to his own use, while the prize-master and one other man were asleep—fastened them below, without being discovered, and then took a pistol in each hand, and gave his his orders to the two on deck, who obeyed; he arrived near Machias on the day following, and landed the prize-master and one man; and again set sail, and arrived at Bucksport on the 3d July, in triumph. I certify the above to be true,

JAMES TURNER.

Bucksport, July 4.

MAJ. BIRDSALL. *Office of the Albany Register, Sunday evening, July* 12.—With heartfelt and unfeigned sorrow, we announce the untimely and the distressing death of the gallant major *Benjamin Birdsall*, of the U. S. army. He was shot on parade this evening a few minutes before eight, and his immortal spirit left its tabernacle of clay, in *one hour and fifty-five minutes* afterwards. He was shot by a soldier by the name of *Hamilton*, who had been enlisted about three months. The murder was deliberate, and the monster exults at its perpetration—he is in prison.

Major *Birdsall* was in conversation with lieut. Scott, in front of his markee. Hamilton presented himself before them, and said "*major I am here.*" On being ordered back to the ranks he made ready and discharged his rifle—the ball entered on the right side, passed near the heart and lodged in the flesh near the back bone.

In defending the rights of his country, this high-minded soldier met danger in its most terrific forms—was mutilated in the most cruel manner by having his face literally shattered to pieces—has undergone surgical operations of the most agonizing nature—suffered pains indescribable—his wounds but just healed—his prospect of returning happiness had barely began to dawn, and he has fallen the *victim of unprovoked assassination.*

Heat.—The heat on Saturday and Sunday last, was excessive—the latter may well be distinguished as the "*hot Sunday!*" The range of the thermometer varied, as usual, according to its situation—but perhaps 95° may be regarded as the lowest and 102° as the highest, as fairly exposed in the shade, on Sunday last, in Philadelphia and Baltimore. Many gentlemen who have had their thermometers suspended in the same place for twenty or thirty years, all unite in asserting, that the mercury was higher by three or four degrees than they had ever before observed it. The sun was *scorching*. Numbers have died in our several cities from drinking cold water; and others expired from excessive heat. In other respects, the cities, Baltimore especially, are very healthy.

BRITISH PACKETS. The Franklin Gazette observes—During a period of *twenty-nine* years before the last American war, the English had lost only *three* of their packets by all the different nations with which they had been at war. During their last contest with America, (a period of not *three* years) out of *thirty-nine*, their original number, they lost *twenty-seven.*

Now when we recollect, that the packets of the English are built expressly for swiftness of sailing, and at the same time are so armed and appointed, as to be capable of active resistance when necessary,—the above fact, without further comment, may add another testimony to our naval enterprise and John Bull's disasters.

TRIAL BY JURY.

Judge Washington. A few days since, in a cause trying before the United States circuit court, this magistrate strongly charged the jury that the question was a point of law, and that they *must* find *for the plaintiff.* The jury retired for a few minutes, when they returned with a verdict *for the defendant.* The next morning the counsel for the plaintiff addressed the court, and said he should not as was usual, move the court for a rule to shew cause why a new trial should be granted, but he would at once move the court for a new trial, on the ground that the jury had found a verdict contrary to the charge of the court. *Judge Washington*, in substance, replied, the motion was perfectly correct, that he would grant a new trial in this case, and if juries should find a verdict *one hundred times* in opposition to the charge of the court, he would grant a new trial.

It is distinctly understood that this was the third time this particular cause had been before the circuit court; that each time the court strongly charged the jury to find for the *plaintiff*, and that each time the jury, on their oaths of affirmation, found for the *defendants.*

Such are the facts as they have been detailed to us. We deem them to be of a character highly interesting to the public. *Dem. Press.*